

REMARKS

STATUS OF THE CLAIMS

Claims 2-6 are pending in the application.

Claims 2-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vannatta et al. (U.S. Patent No. 5,649,306) in view of Chiang et al., U.S. Patent Pub. No. 2004-0046694.

According to the foregoing, the claims are amended, and thus, the pending claims remain for reconsideration, which is respectfully requested. No new matter has been added.

Claim 2 is amended based on Fig.1. The first antenna (102) is provided in the vicinity of a front edge portion on the side opposite to a securing side of the first body on the printed circuit board (101) so as to keep the first antenna (102) remote from the human body when extending the first body away from the securing side and away from the human body when the first body and the second body are unfolded and the second body is held in a hand of the human.

Vannatta (US 5,649,306) column 4, lines 41-62 and FIGS. 1 and 4 disclose antenna 55 disposed in the first housing element 51. And the second and third antenna may be disposed in the second housing element 53. However, if the second housing element 53 is held in a hand, the first antennal 55 extends toward human side when the first housing element 51 and the second housing element 53 is unfolded. Thus, Vannatta's disclosure teaches away from the feature of the amended claim 2, because the first antenna 55 in the first housing element 51 faces the human side when the first housing element 51 and the second housing element 53 are unfolded.

Further, Chiang (US 2004/0046694) discloses a device having no folding mechanism. Thus, a prima facie case of obviousness based upon Vannatta and Chiang cannot be established, because they singly or in combination, fail to disclose expressly or implicitly to one skilled in the art to combine Vannatta with Chiang and then to modify Vannatta's antenna position, which teaches away from the claimed invention since Vannatta first antenna 55 in the first housing element 51 faces the human side when the housing elements are unfolded and the person holds the phone and in Vannatta the second and third antennas 59 in the second housing element 53 are directional antennas such as a patch antenna 59, or to modify Chiang's passive and active antenna configuration to achieve the claimed:

wherein the first antenna is provided in thea vicinity of a front edge portion on thea side opposite to a securing side of the first box-body on the printed circuit board so as to keep the first antenna remote from a human body by extending the first body away from the securing side and away from the human body when the first body and the second body are unfolded and the second body is held in a hand of the human, and

the second antenna is provided on a flip side of a-surface the side of the printed circuit board facing the second box-body on the printed circuit board when the first box-body and the second box-body are folded together so as to set a directional antenna pattern to face away from at the human body when the mobile terminal is kept next to the human body in a folded state in which a flip side surface of the second box-body facing the first box-body also faces the human body.

In other words, even if assuming that in Vannatta the half-wave dipole type antenna could be an omnidirectional antenna, there is no evidence expressly or implicitly to one skilled in the art to modify Vannatta to provide an omnidirectional antenna as a first antenna "in thea vicinity of a front edge portion on thea side opposite to a securing side of the first box-body on the printed circuit board so as to keep the first antenna remote from a human body by extending the first body away from the securing side and away from the human body when the first body and the second body are unfolded and the second body is held in a hand of the human." As discussed above, in Vannatta the half-wave dipole type antenna as first antenna 55 in the first housing element 51 faces the human side when the housing elements are unfolded and the person holds the phone. Further, there is no evidence expressly or implicitly that one skilled in the art would modify Vannatta's second and third directional patch antennas 59 to be omnidirectional antennas and to further modify any such substitution to provide the claimed omnidirectinoal antenna position "in thea vicinity of a front edge portion on thea side opposite to a securing side of the first box-body on the printed circuit board so as to keep the first antenna remote from a human body by extending the first body away from the securing side and away from the human body when the first body and the second body are unfolded and the second body is held in a hand of the human," as shown in FIG. 1 of the present Application.

Further, there is no evidence expressly or implicitly that one skilled in the art would modify Vannatta's second/third directional antenna 59 to provide the claimed directional antenna position with respect to an omnidirectional antenna position of "the second antenna is provided on a flip side of a-surface the side of the printed circuit board facing the second box-body on the printed circuit board when the first box-body and the second box-body are folded together so as

to set a directional antenna pattern to face away from ~~at~~the human body when the mobile terminal is kept next to the human body in a folded state in which a flip side surface of the second box-body facing the first box-body also faces the human body." A benefit of the invention is to provide the omnidirectional antenna so as to move away form a human body when unfolding the cellular phone, because the omnidirectional antenna's receiving sensitivity can be lower than a directional antenna, as discussed in pages 8-9 of the present Application.

In view of the amendments and remarks, withdrawal of the rejection of pending claims and allowance of pending claims is respectfully requested.

CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,
STAAS & HALSEY LLP

/Mehdi D. Sheikerz/

Date: May 27, 2008

By: _____
Mehdi D. Sheikerz
Registration No. 41,307

1201 New York Avenue, N.W., 7th Floor
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501